



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0250; Directorate Identifier 2011-CE-043-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; SOCATA Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for SOCATA Model TBM 700 airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as installation of an incorrect part number during overhaul of the nose landing gear. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact SOCATA – Direction des Services, 65921 Tarbes Cedex 9, France; telephone: +33 (0)5 62 41 73 00; fax: +33 (0)5 62 41 76 54; or in the United States contact SOCATA North America, Inc., North Perry Airport, 7501 South Airport Road, Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141; email: mysocata@socata.daher.com; Internet: www.socatanorthamerica.com. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2012-0250; Directorate Identifier 2011-CE-043-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2011-0235-E, dated December 13, 2011 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

A TBM 700 operator reported a case of rupture of the bolt attaching the actuator hinge axle on the NLG of the aeroplane. The results of the technical investigations carried out by SOCATA revealed that this rupture could have been caused by the installation of a bolt bearing incorrect Part Number (P/N) during overhaul of the NLG. Furthermore, the investigations led to identify the NLG part numbers identified by S/N which are potentially affected after repair or overhaul.

This condition, if not detected and corrected, could lead to partial disengagement of the actuator hinge axle on the NLG of the aeroplane, resulting in nose landing gear collapse, possibly resulting in structural damage to the aeroplane.

To address this condition, SOCATA have developed Service Bulletin SB 70-194-32 which gives instructions for accomplishing repetitive checks of the bolt attaching actuator hinge axle on NLG and for replacing the bolt attaching the actuator hinge axle with a correct bolt P/N.

For the reasons described above, this AD requires accomplishment of repetitive checks of potentially affected NLGs and replacement of the bolt attaching the actuator hinge axle with a serviceable bolt. This AD also prohibits installation on any aeroplane of a potentially affected NLG, unless the bolt attaching the actuator hinge axle has been replaced with a

serviceable bolt and the NLG has been marked with a green varnish line.

Following issuance of EASA AD 2011-0225-E, it has been determined that further NLG P/Ns and S/Ns are affected by this AD. SOCATA have developed an erratum to SB 70-194-32 amendment 2, which lists the new P/Ns and S/Ns as well affected by this AD.

For the above reason, this AD, which supersedes EASA AD 2011-0225-E, retaining its requirements, extends the list of NLG P/Ns and S/Ns affected by the AD requirements.

You may obtain further information by examining the MCAI in the AD docket.

### **Relevant Service Information**

DAHER-SOCATA has issued DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-194-32, Amendment 2, dated November 2011; and Erratum to DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-194-32, Amendment 2, dated December 2011. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### **FAA's Determination and Requirements of the Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Costs of Compliance**

We estimate that this proposed AD will affect 448 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$35 per product.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$53,760, or \$120 per product.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**SOCATA:** Docket No. FAA-2012-0250; Directorate Identifier 2011-CE-043-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to SOCATA Model TBM 700 airplanes, all serial numbers (S/N), certificated in any category, equipped with one of the following landing gears:

(1) Part number (P/N) D23766000 or D23766000-X, serial numbers (S/N) B001 through B373; B375; AR1000 through AR1023; AR1025 through AR1031; AR1033 through AR1036; AAB00000A through AAB13766Z; AAB00000 through AAB13766; and EURXXX; or

(2) P/N 21130-001-XY or 21130-000-XY, all S/N.

**(d) Subject**

Air Transport Association of America (ATA) Code 32: Landing Gear.

**(e) Reason**

This proposed AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as installation of an incorrect part number during overhaul of the nose landing gear. We are issuing this AD to detect and correct installation of incorrect P/N NLG bolts, which if not corrected could result in NLG collapse with consequent structural damage to the airplane.

**(f) Actions and Compliance**

Unless already done, do the following actions using the Accomplishment Instructions of DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-194-32, Amendment 2, dated November 2011; and Erratum to DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-194-32, Amendment 2, dated December 2011:

(1) Although the EASA MCAI allows the inspection of the NLG washer to be done by a pilot-owner, the U.S. regulatory system requires all actions of this AD to be done by a certified mechanic.

(2) Within 5 flight cycles (FC) after the effective date of this AD, inspect the installed NLG to determine if it is one of the affected P/Ns and S/Ns as listed in paragraph (c) of this AD.

(i) If FC data is not available, the use of a one-to-one FC to flight hour conversion must be applied (example: 5 FC equal 5 hours time-in-service (TIS)).

(ii) For the purpose of this AD, when an NLG P/N reference is followed by -X or -XY, the X or XY can be any numerical digit, and when an NLG S/N reference is EURXXX, the XXX can be any numerical digit.

(3) If during the inspection required in paragraph (f)(2) of this AD, you determine the NLG installed is one of the affected P/Ns and S/Ns listed in paragraph c of the AD, inspect for free rotation the washer of the NLG. Repetitively thereafter inspect the washer of the NLG for free rotation before every flight until the replacement required in paragraph (4)(i) or (5) of this AD is done.

(4) If, during any inspection required by paragraph (f)(3) of this AD, the washer of the NLG rotates freely, before further flight, do the following actions:

(i) Replace the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111.

(ii) Mark the landing gear with a green varnish line.

(5) For the NLG P/Ns and S/Ns as listed in paragraph c of this AD, within 10 months after the effective date of this AD, unless already done following a discrepancy identified during any inspection as required by paragraph (f)(3) of this AD, do the following actions:



(i) Replace the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111 and;

(ii) Mark the landing gear with a green varnish line.

(6) Replacing of the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111 and marking the landing gear with a green varnish line terminates the repetitive inspections required by paragraph (f)(3) of this AD.

(7) After the effective date of this AD, do not install an NLG with P/N and S/N as listed in paragraph c of this AD, unless the bolt attaching the actuator hinge axle of the NLG has been replaced and the NLG has been marked with a green varnish line following the requirements of this AD.

**(g) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; e-mail: albert.mercado@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

**(h) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2011-0235-E, dated December 13, 2011; DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-194, Amendment 2, dated November 2011; and Erratum to DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70 194-32, Amendment 2, dated December 2011, for related information. For service information related to this AD, contact SOCATA – Direction des Services, 65921 Tarbes Cedex 9, France; telephone: +33 (0)5 62 41 73 00; fax: +33 (0)5 62 41 7654; or in the United States contact SOCATA North America, Inc., North Perry Airport, 7501 South Airport Road, Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141; email:

mysocata@socata.daher.com; Internet: [www.socatanorthamerica.com](http://www.socatanorthamerica.com). You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on March 5, 2012.

John Colomy,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

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